

Release notes for ENDF/B Development n-029_Cu_065
evaluation



April 26, 2017

- fudge-4.0 Warnings:

1. A covariance format not yet supported by fudge (LRF=7 covariances)
Reading ENDF file: .. /n-029_Cu_065.endf (Error # 1): Cov. unimp. (e)

WARNING: skipping LRF=7 resonance covariances!

- 2.FIXME: Another genuine fudge bug!
(Error # 2): Fudge check bug

FAILURE: ENDF EVALUATION CHECKING HALTED BECAUSE list index out of rangelist index out of range

- fudge-4.0 Errors:

1. The sum of the gamma branching ratios going out of a specific level do not sum to 1.0.
Reading ENDF file: .. /n-029_Cu_065.endf (Error # 0): Sum BRs

WARNING: sum of gamma BR's for MT=65 MF=12 is 0.999999 != 1.0
WARNING: sum of gamma BR's for MT=82 MF=12 is 1.000002 != 1.0

2. Exception IndexError was thrown

FAILURE: ENDF EVALUATION CHECKING HALTED BECAUSE list index out of rangelist index out of range (Error # 1): IndexError

IndexError: list index out of range

- njoy2012 Warnings:

1. Evaluation has no unresolved resonance parameters given
unresr...calculation of unresolved resonance cross sections (0): No URR

---message from unresr---mat 2931 has no unresolved parameters
copy as is to nout

2. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (0): HEATR/hinit (4)

---message from hinit---mf6, mt 16 does not give recoil za= 29064
one-particle recoil approx. used.

3. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (1): HEATR/hinit (4)

---message from hinit---mf6, mt 17 does not give recoil za= 29063
one-particle recoil approx. used.

4. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (2): HEATR/hinit (4)

---message from hinit---mf6, mt 22 does not give recoil za= 27061
one-particle recoil approx. used.

5. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (3): HEATR/hinit (4)

```
---message from hinit---mf6, mt 28 does not give recoil za= 28064
one-particle recoil approx. used.
```

6. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (4): HEATR/hinit (4)

```
---message from hinit---mf6, mt 32 does not give recoil za= 28063
one-particle recoil approx. used.
```

7. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (5): HEATR/hinit (4)

```
---message from hinit---mf6, mt 91 does not give recoil za= 29065
one-particle recoil approx. used.
```

8. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (6): HEATR/hinit (4)

```
---message from hinit---mf6, mt102 does not give recoil za= 29066
photon momentum recoil used.
```

9. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (7): HEATR/hinit (4)

```
---message from hinit---mf6, mt103 does not give recoil za= 28065
one-particle recoil approx. used.
```

10. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (8): HEATR/hinit (4)

```
---message from hinit---mf6, mt104 does not give recoil za= 28064
one-particle recoil approx. used.
```

11. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (9): HEATR/hinit (4)

```
---message from hinit---mf6, mt105 does not give recoil za= 28063
one-particle recoil approx. used.
```

12. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (10): HEATR/hinit (4)

```
---message from hinit---mf6, mt107 does not give recoil za= 27062
one-particle recoil approx. used.
```

13. Evaluation has no unresolved resonance parameters given
purr...probabalistic unresolved calculation (0): No URR

```
---message from purr---mat 2931 has no unresolved parameters
copy as is to nout
```

14. There is bad Kalbach parameter (r(E) or otherwise)
check...ace consistency check (0): ACER/check energy distributions (0)

```
check energy distributions
consis: ep.gt.epmax 9.696388E-12 with q.lt.0 for (n,x) at e 1.000000E-11 -> 1.000000E-11
```

15. There is bad Kalbach parameter ($r(E)$ or otherwise)
check...ace consistency check (1): ACER/check energy distributions (0)

```
check energy distributions
  consis: awr.lt.180---this is probably an error.
```

16. There is bad Kalbach parameter ($r(E)$ or otherwise)
check...ace consistency check (2): ACER/check energy distributions (0)

```
check energy distributions
  consis: shifting eprimes greater than epmax and renorming the distribution
```

17. There is bad Kalbach parameter ($r(E)$ or otherwise)
check...ace consistency check (3): ACER/check energy distributions (0)

```
check energy distributions
  consis: ep.gt.epmax 9.696388E+01 with q.lt.0 for (n,x) at e 1.000000E+02 -> 9.699319E+01
```

18. There is bad Kalbach parameter ($r(E)$ or otherwise)
check...ace consistency check (4): ACER/check energy distributions (0)

```
check energy distributions
  consis: awr.lt.180---this is probably an error.
```

19. There is bad Kalbach parameter ($r(E)$ or otherwise)
check...ace consistency check (5): ACER/check energy distributions (0)

```
check energy distributions
  consis: shifting eprimes greater than epmax and renorming the distribution
```

20. There is bad Kalbach parameter ($r(E)$ or otherwise)
check...ace consistency check (6): ACER/check energy distributions (0)

```
check energy distributions
  consis: ep.gt.epmax 1.066602E+02 with q.lt.0 for (n,x) at e 1.100000E+02 -> 1.068402E+02
```

21. There is bad Kalbach parameter ($r(E)$ or otherwise)
check...ace consistency check (7): ACER/check energy distributions (0)

```
check energy distributions
  consis: awr.lt.180---this is probably an error.
```

22. There is bad Kalbach parameter ($r(E)$ or otherwise)
check...ace consistency check (8): ACER/check energy distributions (0)

```
check energy distributions
  consis: shifting eprimes greater than epmax and renorming the distribution
```

- **acelst** Warnings:

1. The incident energy grid is not monotonic for this angular distribution
0: Bad Ang. Dist.

```
ACELST WARNING - Processing Ang.Dist.MT          2
E-grid non-monotonic   2.000000000E+01 2.000000000E+01
```

- **endf2htm** Warnings:

1. Build of a section of the HTML page failed because the format hasn't been implemented in ENDF2HTM.
MF32MT151: Unimplemented

```
At line 2659 of file endf.f
Fortran runtime error: Bad value during integer read
```

- **xsectplotter** Warnings:

1. A covariance format not yet supported by fudge (LRF=7 covariances)
(Error # 3): Cov. unimp. (e)

```
WARNING: skipping LRF=7 resonance covariances!
```

- **xsectplotter** Errors:

1. The sum of the gamma branching ratios going out of a specific level do not sum to 1.0.
(Error # 2): Sum BRs

```
WARNING: sum of gamma BR's for MT=65 MF=12 is 0.999999 != 1.0
WARNING: sum of gamma BR's for MT=82 MF=12 is 1.000002 != 1.0
```